



Ministry
of the
Environment

Hon. Jim Bradley
Minister

Gary S. Posen
Deputy Minister

about pesticides

NUMBER: 30-01-08

DATE: June 1988

AQUATIC WEED CONTROL IN PONDS



A. Legal Requirements

1. Pesticides must be registered under the federal Pest Control Products (PCP) Act before they are legal for sale and use in Canada.
2. Pesticides must also be scheduled under the provincial Pesticides Act, before they are legal for sale and use in Ontario.
3. The pesticide label which carries a registration number under the PCP Act, is a legal document. The pesticide must be used only in the manner specified on the label for the purposes specified on the label. Any other use is illegal.
ALWAYS READ THE LABEL CAREFULLY.
4. A Permit to Purchase and/or Perform a Water Extermination must be obtained before any pesticide can be legally applied to surface waters (e.g. ponds, lakes, rivers), in Ontario.

NOTE: an exemption from the permit requirement is made for "agriculturalists" who wish to treat a pond wholly confined within their property and where there is no outflow at any time, beyond their property limits.

B. Algae Control

Excessive algal growth is a major problem affecting many farm ponds. It can destroy the appearance of the water as well as interfere with its intended uses (e.g. swimming, boating, fish rearing, fire protection, crop irrigation, livestock watering, etc.). Certain blue green algal blooms may also pose a health hazard to humans and animals due to the production of potent toxins.

Pesticides currently available for the effective control of algae are listed on the following two pages.

Copyright Provisions and Restrictions on Copying:

This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at copyright@ontario.ca

1. For ponds with no outflow:

- a) Copper-based compounds: SLOW RELEASE ALGIMYCIN PLL-C
ALGIMYCIN PLL-C
CUTRINE PLUS
CUTRINE PLUS GRANULAR

Restrictions:

- ° These products may be used only in ponds which are wholly confined within the property of the user and where there is no outflow beyond the property limits at any time.
- ° Application is prohibited in public waters or watercourses that may drain into public waters.
- ° Not for use in potable water systems.

Fish Caution:

- ° May be extremely toxic to fish, particularly trout, in soft waters at any concentration and in hard waters at concentrations greater than 0.4 ug/L.
- ° To avoid suffocation of fish due to lack of oxygen caused by decaying vegetation, treat 1/4 to 1/3 of the pond at one time. Wait two weeks before treating another section of the pond.
- ° Extreme caution is advised when using copper compounds in ponds containing fish.

Note: Copper sulphate (Bluestone) is not registered in Canada for aquatic use. Therefore, it is illegal to use copper sulphate for aquatic weed control in Ontario.

- b) Watersoluble Dyes: AQUASHADE

Restrictions:

- ° Do not use in water where loss of dye can occur by water exchange or overflow such as lakes, running streams or ponds with an outlet.
- ° Do not apply to water that will be used for drinking or other domestic purposes.

Fish Caution:

- ° Mechanically remove heavy vegetation before applying Aquashade, to avoid oxygen depletion and fish suffocation.

2. For Ponds with Little or No Outflow:

- a) Simazine: SIMMAPRIM NINE-T
PRINCEP NINE-T
SIMADEX 80W
SIMADEX FLOWABLE

Restrictions

- ° Do not use water from treated ponds for irrigation or human consumption.
- ° Treated water coming in contact with grass or other vegetation may cause damage.
- ° May damage trees such as willows, or shrubs growing around the pond.

Fish Caution:

- ° Do not use fish taken from treated ponds for human consumption.
- ° Treat only a small portion of the pond at one time to avoid oxygen depletion and fish suffocation.

Note: Although simazine may be used to control algae in ponds with little flow, the outflow from the pond should be shut off for a minimum of 10 days following treatment.

- b) Diuron: KARMEX

Restrictions:

- ° Do not use in domestic water supplies.
- ° Do not use water from treated ponds within one year for irrigation.
- ° Do not apply to ponds having desirable trees or shrubs on the perimeter or to areas where their roots may extend.
- ° Do not drain ponds into areas containing desirable plants.

Fish Caution:

- ° At present, the registrant advises that the use of KARMEX should be restricted to bodies of water that are NOT producing fish for human consumption!
- ° Treat only a small portion of the pond at one time to avoid oxygen depletion and fish suffocation.

Note: Diuron is not effective in flowing water.

C. Other Aquatic Plants Control

Many aquatic plants including submergent, floating or emergent species, can be controlled effectively with available pesticides as shown below.

1. For Ponds with Little or No Outflow

- a) Simazine: (see previous section for tradenames, restrictions and cautions)

For control of: pondweeds, Canada waterweed, duckweed, coontail, watermoss, naiad and milfoil.

- b) Diuron: (see previous section for tradenames, restrictions and cautions)

For control of: naiads, pondweeds, duckweed and bladderwort.

2. For Ponds With or Without Outflow

- a) Diquat: REGLONE A

For control of: coontail, pondweeds, water milfoil, duckweed and Canada waterweed.

Restrictions:

- ° Do not use treated water for at least 24 hours after treatment for swimming, human or animal consumption.
- ° Do not use treated water for irrigation for at least 5 days.

Fish Caution:

- ° Treat only a small portion of the pond at one time to avoid oxygen depletion and fish suffocation.

b) 2,4-D: AQUA-KLEEN

For control of: water milfoil, water stargrass, bladderwort, white water lily, yellow water lily, water shield, coontail and marine eelgrass.

Restrictions:

- ° Do not treat within 1.0 kilometre of any active water intake.
- ° Do not use water from treated area for consumption by humans or livestock or for irrigation of 2,4-D sensitive crops, for at least 60 days after treatment in confined waters.

Fish Caution:

- ° Treat early in season when weed growth is sparse to avoid oxygen depletion and fish suffocation.

c) Paraquat: GRAMOXONE

For control of: cattails, bullrushes, and emerged grasses.

Restrictions:

- ° Do not use treated water for 7 days for swimming, human or animal consumption.
- ° Do not use treated water for irrigation for 5 days.

D. Alternative Methods of Control

See Ministry of the Environment Factsheet #30 01 06, "Alternatives to Chemical Control of Aquatic Weeds".

NOTE: This factsheet is not intended to supersede or replace any product label. All label directions must be strictly followed. This factsheet has been reviewed by the Ontario Pesticides Advisory Committee.